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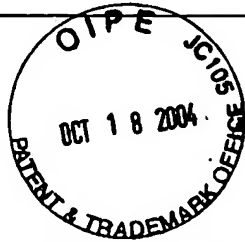
**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant(s): Jeong

Serial No.: 10/829,593

Filed: 4/21/2004

Title: APPARATUS AND METHOD FOR  
POLISHING SEMICONDUCTOR  
WAFERS USING ONE OR MORE  
POLISHING SURFACES



Group Art Unit: 3723

Examiner: Unknown

Attorney Docket No.: INK-002

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT**

Dear Sir:

This Information Disclosure Statement is submitted:

- ☒ under 37 CFR 1.97(b), or  
(Within three months of filing national application; or date of entry of international application; or before mailing date of first office action on the merits; whichever occurs last)
- ☐ under 37 CFR 1.97(c) together with either a:
- ☐ Statement under 37 CFR 1.97(e), or
  - ☐ a \$180.00 fee under 37 CFR 1.17(p), or  
(After the CFR 1.97(b) time period, but before final action or notice of allowance, whichever occurs first)
- ☐ under 37 CFR 1.97(d) together with a:
- ☐ Statement under 37 CFR 1.97(e), and
  - ☐ a \$180.00 fee set forth in 37 CFR 1.17(p).  
(Filed after final action or notice of allowance, whichever occurs first, but before payment of the issue fee)

☒ Applicant(s) submit herewith Form PTO 1449-Information Disclosure Citation together with copies, of patents, publications or other information of which applicant(s) are aware, which applicant(s) believe(s) may be material to the examination of this application and for which there may be a duty to disclose in accordance with 37 CFR 1.56.

The relevance of the attached references is that this is the closest art of which Applicant is aware. Applicant submits that the above references taken alone or in combination neither anticipate nor render obvious the present invention. Consideration of the foregoing in relation to this application is respectfully requested.

It is requested that the information disclosed herein be made of record in this application.

I hereby certify that this is being deposited with the U.S. Postal Service "Express Mail Post Office to Addressee" service under 37 CFR § 1.10 on the date indicated below and is addressed to:

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*Thomas H. Ham*

Typed Name: Thomas H. Ham

Express Mail Label No.: ER894296445US

Date of Deposit: October 18, 2004

Respectfully submitted,

*Thomas H. Ham*

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Date: October 18, 2004

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## CONCISE EXPLANATION OF 2003-0067391 REFERENCE

The first figure shows a CMP apparatus that includes in part two polishing modules PM1 and PM2, three loading devices 21, 22 and 23, a wafer transfer device 16 and a cleaning unit 40.

In a serial mode, the wafer transfer device 16 transfers a wafer to be polished to the loading device 21. The loading device 21 transfers the wafer to the polishing module PM1, where the wafer is polished. The loading device 22 transfers the wafer from the polishing module PM1 to the polishing module PM2, where the wafer is further polished. The loading device 23 transfers the wafer from the polishing module PM2 to the wafer transfer device 16. The wafer transfer device 16 transfers the wafer to the cleaning unit 40.

In a first parallel mode, the wafer transfer device 16 transfers wafers to be polished to the loading devices 21 and 23, respectively. The loading device 21 transfers the wafer to the polishing module PM1, where the wafer is polished. The loading device 23 transfers the wafer to the polishing module PM2, where the wafer is polished. After the wafers are polished, the loading device 22 transfers the wafers from the polishing modules PM1 and PM2 to the wafer transfer device 16.

In a second parallel mode, the wafer transfer device 16 transfers wafers to be polished to the loading device 22 which transfers the wafers to the polishing modules PM1 and PM2, respectively. The wafers polished in the polishing modules PM1 and PM2 are unloaded to the loading devices 21 and 23, respectively, and then transferred to the wafer transfer device 16.



PTO/SB/08a (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

**Complete if Known**

Application Number	10/829,593
Filing Date	4/21/2004
First Named Inventor	Jeong
Art Unit	3723
Examiner Name	Unknown
Attorney Docket Number	INK-002

Sheet

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**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)			
		US-6,780,083 B2	08-24-2004	Ising et al.	
		US-2004/0009738 A1	01-15-2004	Doi et al.	
		US-2003/0217811 A1	11-27-2003	Jeong	
		US-6,575,818 B2	06-10-2003	Jeong	
		US-2002/0177386 A1	11-28-2002	Smith	
		US-2002/0137448 A1	09-26-2002	Suh et al.	
		US-6,346,038 B1	02-12-2002	Kajiwaru et al.	
		US-6,050,885	04-18-2000	Mörsch et al.	
		US-6,048,259	04-11-2000	Asai	
		US-5,908,347	06-01-1999	Nakajima et al.	
		US-5,618,227	04-08-1997	Tsutsumi et al.	
		US-5,605,487	02-25-1997	Hileman et al.	
		US-5,549,502	08-27-1996	Tanaka et al.	
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**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				
		2003-0067391	08-14-2003	Paik et al.	See attached paper	

Examiner Signature		Date Considered	
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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